97-84194-7

Industrial Commission of Wisconsin

Factory equipment, housekeeping...

[Madison?]

[1918]

97-84194-7
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

308
Z
Box 138

Wisconsin. *Industrial commission.*

Factory equipment, housekeeping and supervision. A handbook for employers of women, containing the provisions of the statutes regarding labor standards and suggestions for improved equipment and housekeeping. Industrial commission of Wisconsin. Women's department. September, 1918. [Madison? 1918]

22 p. illus. 23cm.

1. Woman — Employment — Wisconsin. 2. Welfare institutions for laborers. I. Title.

Library of Congress HD6093.W65 1918 19-27061
[2]

RESTRICTIONS ON USE: *Reproductions may not be made without permission from Columbia University Libraries.*

TECHNICAL MICROFORM DATA

FILM SIZE: 35mm REDUCTION RATIO: 10:1 IMAGE PLACEMENT: IA (IIA) IB IIB

DATE FILMED: 9-22-97 INITIALS: AP

TRACKING # : 27827

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

INTENTIONAL
SECOND
EXPOSURES DUE TO
PHOTOGRAPHS

Property of
Legislative Drafting Department
Columbia University

B14
308
Z
Box 138

FACTORY EQUIPMENT, HOUSEKEEPING and SUPERVISION

A Handbook for Employers of Women, Containing the Provisions of the Statutes Regarding Labor Standards and Suggestions for Improved Equipment and Housekeeping

INDUSTRIAL COMMISSION OF WISCONSIN
WOMEN'S DEPARTMENT

September, 1918

Factory Equipment, Housekeeping and Supervision

A Handbook for Employers of Women, Containing the Provisions of the Statutes Regarding Labor Standards and Suggestions for Improved Equipment and Housekeeping.

INDUSTRIAL COMMISSION OF WISCONSIN
WOMEN'S DEPARTMENT
September, 1918

TABLE OF CONTENTS

	Page
Hours of Labor	3
Prohibited Employments	7
Safety	9
Sanitation	16
Equipment	17
Housekeeping and Supervision	21

Industrial Commission of Wisconsin

GEO. P. HAMBRECHT, *Chairman* FRED M. WILCOX

THOMAS F. KONOP

E. E. WITTE, *Secretary* MAUD SWETT, *Assistant Secretary*

TRACY COPP, *Director of Women's Department*

Issued September 1, 1918

HOURS OF LABOR[1]

A summary of the requirements of Sections 1728—1 to 1728—4, inclusive, of the Statutes of Wisconsin, and of all orders of the Industrial Commission.

I. In Manufactories and Laundries:

1. *Night Work Prohibited.*

In manufactories and laundries only day work is permitted. Women may not be employed before 6 A. M. or after 6 P. M.[2]

2. *Limitations Upon Day Work.*

Women may be employed at day work not to exceed ten hours in any day and not to exceed fifty-five hours in any week, exclusive of meal periods.

3. *Meal Period.*

Women must be allowed at least one hour for dinner, except that in Milwaukee, in manufactories, in which a room conveniently located has been adequately equipped as a lunch room, the lunch period may be 45 minutes.

Note (1). The limitations upon the hours of labor of women stated in this bulletin apply to women over sixteen years of age. The hours of labor of girls, as well as of boys below sixteen, are governed by the child labor law. Copies of this law will be supplied by the Industrial Commission on request.

Note (2). Employes engaged in purely office duties or as janitresses in manufactories and laundries are not included within the above prohibition of night work.

Pea canneries are not manufactories within the meaning of this order.

Job printing offices are manufactories within the meaning of this order.

Condenseries have been permitted to keep their women employes until seven o'clock on Saturday evenings, provided that these women do not work at all on Sunday, and provided that they do not exceed the limit of ten hours per day or fifty-five hours per week.

I. In Mechanical or Mercantile Establishments, Restaurants, Confectionery Stores, Telegraph or Telephone Offices or Exchanges, Express and Transportation Establishments (other than street cars).

1. *Limitations Upon Day Work.*

Women may be employed not more than 10 hours in any one day or more than fifty-five hours in any one week, exclusive of meal period. Day work is work between 6 A. M. and 6:30 P. M.

Fig. 1.—Girls' dressing room, showing metal rod with fixed coat hangers, and wire shelving for hats.

2. *Limitations Upon Night Work.*

Women may be employed at night work not more than eight hours in any one night or more than forty-eight hours in any one week, exclusive of meal periods.

3. *Part Day and Part Night Work.*

If women are employed before 6 A. M. or after 6:30 P. M. on more than one night in any week, then the limitations for night work, which are given in the preceding paragraph, apply. But if women are employed before 6 A. M. or after 6:30 P. M. only one night per week, then the limitations upon day work apply.

4. *Meal Period.*

Women must be allowed at least one hour during each day or night for dinner or other meals, except, that in restaurants, the meal period may be 30 minutes, if the stretch of labor between meals does not exceed five hours and if the employes eat their meals upon the premises.

III. On Street Car Lines.

In cities of the first class, women may be employed as conductors, motormen or flagmen by street car lines only at day work between the hours of 8 A. M. and 6 P. M.

Fig. 2.—Dressing room, showing rod for coats, with metal lockers for hats, purses, etc. Note useful wooden benches and waste cans.

In all other cities and in towns and villages, women may be employed in the employments mentioned in the paragraph above only at day work between the hours of 6 A. M. and 5 P. M., and their hours of labor during the day must not exceed eight hours, exclusive of meal periods.

Women employed by street car lines in other positions than as conductors, motormen or flagmen, may work the hours indicated under II above.

IV. Hours to be Posted.

Section 1728—3 of the Statutes makes it the duty of every employer to post in a conspicuous place in each of the several departments in or for which women are employed, a list on a printed form

II. In Mechanical or Mercantile Establishments, Restaurants, Confectionery Stores, Telegraph or Telephone Offices or Exchanges, Express and Transportation Establishments (other than street cars).

1. *Limitations Upon Day Work.*

Women may be employed not more than 10 hours in any one day or more than fifty-five hours in any one week, exclusive of meal period. Day work is work between 6 A. M. and 6:30 P. M.

Fig. 1.—Girls' dressing room, showing metal rod with fixed coat hangers, and wire shelving for hats.

2. *Limitations Upon Night Work.*

Women may be employed at night work not more than eight hours in any one night or more than forty-eight hours in any one week, exclusive of meal periods.

3. *Part Day and Part Night Work.*

If women are employed before 6 A. M. or after 6:30 P. M. on more than one night in any week, then the limitations for night work, which are given in the preceding paragraph, apply. But if women are employed before 6 A. M. or after 6:30 P. M. only one night per week, then the limitations upon day work apply.

4. *Meal Period.*

Women must be allowed at least one hour during each day or night for dinner or other meals, except, that in restaurants, the meal period may be 30 minutes, if the stretch of labor between meals does not exceed five hours and if the employes eat their meals upon the premises.

III. On Street Car Lines.

In cities of the first class, women may be employed as conductors, motormen or flagmen by street car lines only at day work between the hours of 8 A. M. and 6 P. M.

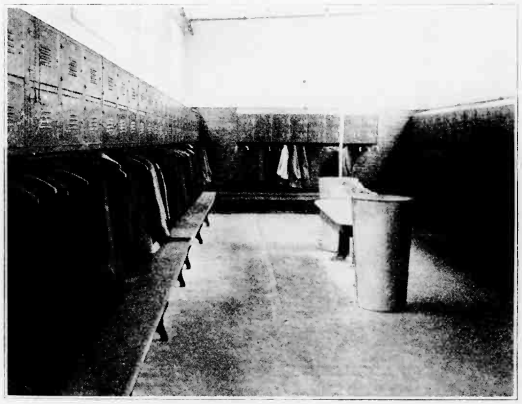

Fig. 2.—Dressing room, showing rod for coats, with metal lockers for hats, purses, etc. Note useful wooden benches and waste cans.

In all other cities and in towns and villages, women may be employed in the employments mentioned in the paragraph above only at day work between the hours of 6 A. M. and 5 P. M., and their hours of labor during the day must not exceed eight hours, exclusive of meal periods.

Women employed by street car lines in other positions than as conductors, motormen or flagmen, may work the hours indicated under II above.

IV. Hours to be Posted.

Section 1728—3 of the Statutes makes it the duty of every employer to post in a conspicuous place in each of the several departments in or for which women are employed, a list on a printed form

furnished by the Industrial Commission, stating the names and hours required of each woman during each day of the week, the hours of commencing and stopping work, and the period allowed for dinner or other meals. Such list need not be posted where time records are kept for inspection by the said commission for a period of at least six months prior to such inspection or where any other substitute equally effective for the enforcement of sections 1728—1 to 1728—4, inclusive, is approved by the commission. Blanks for posting the lists required by this section will be furnished by the Industrial Commission.

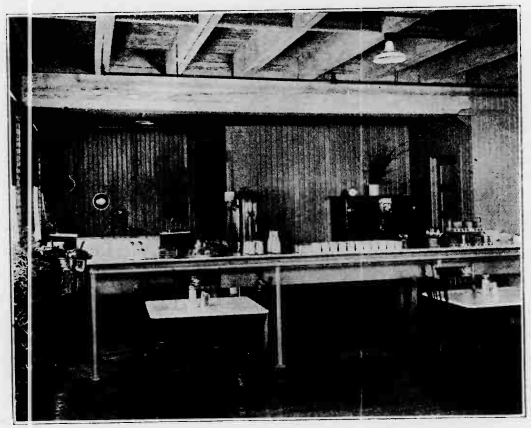

Fig. 3.—Girls' lunch room, with white topped tables and with cafeteria counter and kitchen equipment at end of room.

PROHIBITED EMPLOYMENTS

The only employment specifically prohibited to adult women by the laws of Wisconsin is employment in or about any mine or quarry.

Subsection (2) of section 1728*a* of the Statutes of Wisconsin, however, makes it the duty of the Industrial Commission, and vests it with authority to issue general or special orders prohibiting the employment of women in any employment or place of employment dangerous or prejudicial to the life, health, safety or welfare of such women.

Upon advice of the State Board of Health, the Industrial Commission has asked that women shall not be employed in "pickling rooms" in the shops of the metal trades.

Women should not be required to lift and carry heavy weights. Standards set by two eastern states and by the Ordnance Department of the War Department, fix the maximum weight which a woman should be allowed to lift and carry at twenty-five pounds. This should be materially reduced if women are required to lift such a weight often or to carry it any distance.

The Industrial Commission is undertaking further studies of hazardous occupations for women, especially of occupations in which there is risk of poisons, such as lead, chlorine, etc.

Note (3). The discussion of prohibited employments here given applies to adult women. For employments prohibited to girls, see the leaflet of the Industrial Commission on "Employments Prohibited to Children."

furnished by the Industrial Commission, stating the names and hours required of each woman during each day of the week, the hours of commencing and stopping work, and the period allowed for dinner or other meals. Such list need not be posted where time records are kept for inspection by the said commission for a period of at least six months prior to such inspection or where any other substitute equally effective for the enforcement of sections 1728—1 to 1728—4, inclusive, is approved by the commission. Blanks for posting the lists required by this section will be furnished by the Industrial Commission.

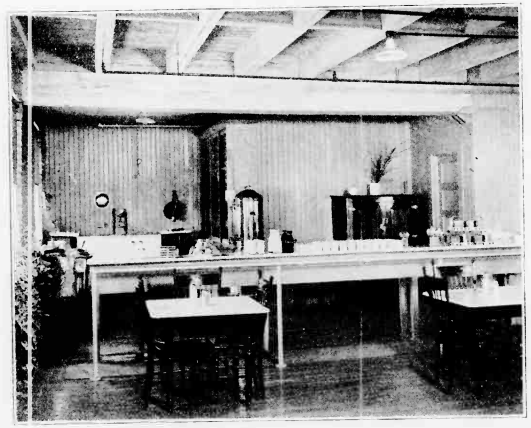

Fig. 2.—Girls' lunch room, with white topped tables and with cafeteria counter and kitchen equipment at end of room.

PROHIBITED EMPLOYMENTS

The only employment specifically prohibited to adult women by the laws of Wisconsin is employment in or about any mine or quarry.

Subsection (2) of section 1728*a* of the Statutes of Wisconsin, however, makes it the duty of the Industrial Commission, and vests it with authority to issue general or special orders prohibiting the employment of women in any employment or place of employment dangerous or prejudicial to the life, health, safety or welfare of such women.

Upon advice of the State Board of Health, the Industrial Commission has asked that women shall not be employed in "pickling rooms" in the shops of the metal trades.

Women should not be required to lift and carry heavy weights. Standards set by two eastern states and by the Ordnance Department of the War Department, fix the maximum weight which a woman should be allowed to lift and carry at twenty-five pounds. This should be materially reduced if women are required to lift such a weight often or to carry it any distance.

The Industrial Commission is undertaking further studies of hazardous occupations for women, especially of occupations in which there is risk of poisons, such as lead, chlorine, etc.

Note (3). The discussion of prohibited employments here given applies to adult women. For employments prohibited to girls, see the leaflet of the Industrial Commission on "Employments Prohibited to Children."

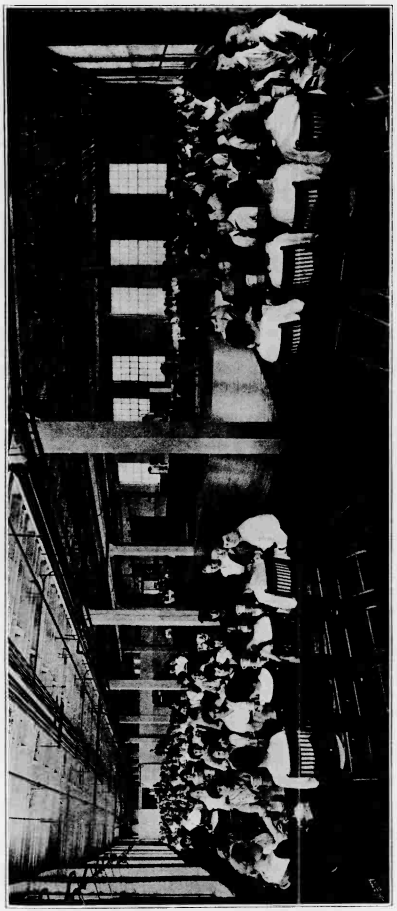

Fig. 4.—Factory lunch room, with floor space for dancing.

SAFETY

Special attention should be given to safety in all factories where women are employed. The newness of women in many industrial occupations, their general lack of experience with any kind of machinery, their limitations as regards muscular strength, and their style of dress, such as the wearing of long hair, loose clothing, ornaments etc., are characteristic factors, which render them liable to accidental injury.

To prevent accidents it is necessary to give attention to three subjects: (a) safeguarding the physical equipment of the plant; (b) education and organization of the employes; (c) supervision of safety work and maintenance of improved conditions.

Safeguarding of Physical Equipment

Buildings must be structurally safe and must be provided with the required exits. (See State Building Code and Orders on Existing Buildings.)

Conditions with respect to sanitation, ventilation, heating and lighting should be brought up to the highest standards of efficiency as these conditions have an important relation to the accident rate of any shop.

Machinery and all mechanical equipment should be the best obtainable so as to reduce to a minimum the accidents due to structural defects or to the use of inferior materials. Regular inspections should be made and defects immediately repaired. Accidents due to defective equipment are usually the most serious of all.

All danger points of transmission apparatus, moving parts of machines, live parts of electrical equipment, floor or wall openings, vats, stairs, platforms, etc., should be thoroughly safeguarded. Mechanical guards should be selected or constructed with a view towards obtaining one hundred per cent efficiency in the function of the guard. Too often makeshift guards are applied with the result that they afford inadequate protection, deteriorate quickly, are soon destroyed or discarded, and are not promptly replaced. Guards should give complete protection, should be strong and durable and should be securely fastened in place.

The employer should take pains to see that all such safeguards are constructed according to the standards accepted by the Industrial Commission and the Wisconsin Inspection and Rating Bureau. He may then feel certain that his guards will give adequate pro-

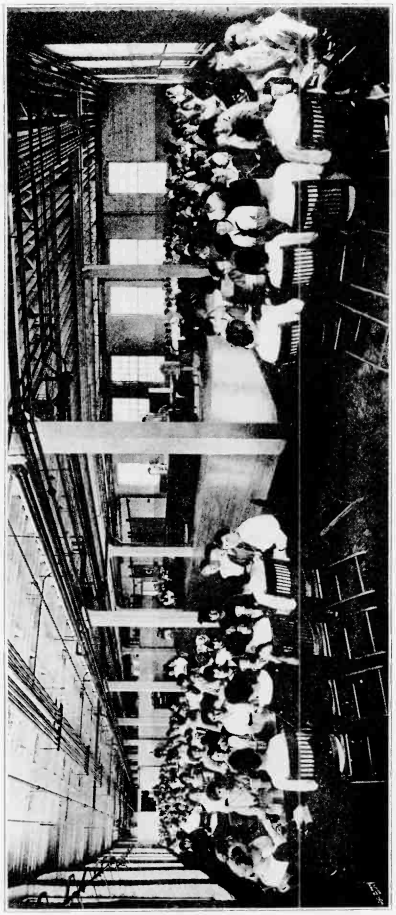

Fig. 4. Factory lunch room, with floor space for dancing.

SAFETY

Special attention should be given to safety in all factories where women are employed. The newness of women in many industrial occupations, their general lack of experience with any kind of machinery, their limitations as regards muscular strength, and their style of dress, such as the wearing of long hair, loose clothing, ornaments etc., are characteristic factors, which render them liable to accidental injury.

To prevent accidents it is necessary to give attention to three subjects: (a) safeguarding the physical equipment of the plant; (b) education and organization of the employes; (c) supervision of safety work and maintenance of improved conditions.

Safeguarding of Physical Equipment

Buildings must be structurally safe and must be provided with the required exits. (See State Building Code and Orders on Existing Buildings.)

Conditions with respect to sanitation, ventilation, heating and lighting should be brought up to the highest standards of efficiency as these conditions have an important relation to the accident rate of any shop.

Machinery and all mechanical equipment should be the best obtainable so as to reduce to a minimum the accidents due to structural defects or to the use of inferior materials. Regular inspections should be made and defects immediately repaired. Accidents due to defective equipment are usually the most serious of all.

All danger points of transmission apparatus, moving parts of machines, live parts of electrical equipment, floor or wall openings, vats, stairs, platforms, etc., should be thoroughly safeguarded. Mechanical guards should be selected or constructed with a view towards obtaining one hundred per cent efficiency in the function of the guard. Too often makeshift guards are applied with the result that they afford inadequate protection, deteriorate quickly, are soon destroyed or discarded, and are not promptly replaced. Guards should give complete protection, should be strong and durable and should be securely fastened in place.

The employer should take pains to see that all such safeguards are constructed according to the standards accepted by the Industrial Commission and the Wisconsin Inspection and Rating Bureau. He may then feel certain that his guards will give adequate pro-

tection and that he will receive due credit in the form of lower insurance rates. The commission will gladly respond to requests from employers for the services of its safety engineers to advise them regarding the specifications and requirements of the safety standards. Liability insurance companies also offer similar service through their field inspectors. The uniform standards adopted by the commission and the Rating Bureau have not yet been published. It is expected, however, that they will appear in print shortly.

For information regarding danger points to be safeguarded, see General Orders on Safety, Electrical Safety Code, Laundry Safety Orders, Elevator Safety Orders, etc., published by the commission.

Fig. 5.—Factory lunch room located on 7th floor where between four and five hundred men and women are served daily. Men's smoking room and porch for recreation in connection.

Women employed as machine operatives in metal working establishments are frequently put to work at lathes, drill presses, milling machines and punch presses. For the convenience of plants in which women are engaged at such work, the standards to be met in safeguarding these machines are described in the following:

Lathes

1. Tight and loose pulley belt shifter or clutch lever to be equipped with automatic locking device. (Required.)
2. Cone pulley, and back gears to be enclosed to a height of six feet from the floor. Back gear shifting lever shall extend through guard. (Recommended.)
3. Cone pulley belt shifter to be applied. (Recommended.)

4. All other power driven gears to be completely enclosed. (Required.)
5. Chuck to be preferably of a safety type and to be enclosed on edges by stationary band guard with provision for adjusting stock. (Recommended.)
6. Lathe dogs to be of a safety type or enclosed. (Recommended.)
7. Tool to be guarded at point of contact by adjustable chip guard. (Recommended.)

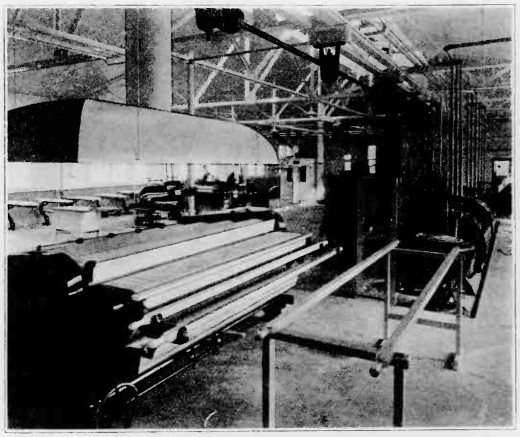

Fig. 6.—Laundry where good working conditions are maintained by facilities for carrying off steam, heat, etc.

Drill Presses

1. Driving belts should be guarded to height of six feet from floor. (Required.)
2. Tight and loose pulley belt shifter to extend through guard and to be equipped with automatic locking device. (Required.)
3. Cone pulley belt shifter to be applied. (Recommended.)
4. All power driven gears to be completely enclosed. (Required.)
5. Spindle shaft to be enclosed in sheet metal casing. (Required.) This is important as a woman's hair may very easily become caught on the revolving spindle.

tection and that he will receive due credit in the form of lower insurance rates. The commission will gladly respond to requests from employers for the services of its safety engineers to advise them regarding the specifications and requirements of the safety standards. Liability insurance companies also offer similar service through their field inspectors. The uniform standards adopted by the commission and the Rating Bureau have not yet been published. It is expected, however, that they will appear in print shortly.

For information regarding danger points to be safeguarded, see General Orders on Safety, Electrical Safety Code, Laundry Safety Orders, Elevator Safety Orders, etc., published by the commission.

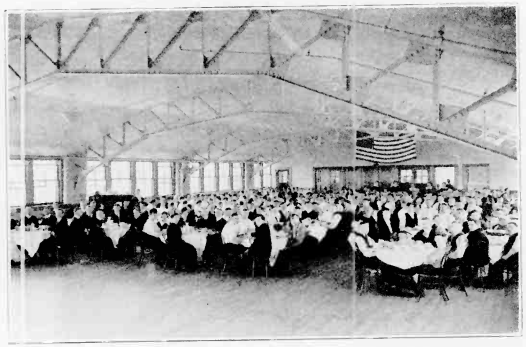

Fig. 5.—Factory lunch room located on 7th floor where between four and five hundred men and women are served daily. Men's smoking room and porch for recreation in connection.

Women employed as machine operatives in metal working establishments are frequently put to work at lathes, drill presses, milling machines and punch presses. For the convenience of plants in which women are engaged at such work, the standards to be met in safeguarding these machines are described in the following:

Lathes

1. Tight and loose pulley belt shifter or clutch lever to be equipped with automatic locking device. (Required.)
2. Cone pulley, and back gears to be enclosed to a height of six feet from the floor. Back gear shifting lever shall extend through guard. (Recommended.)
3. Cone pulley belt shifter to be applied. (Recommended.)

4. All other power driven gears to be completely enclosed. (Required.)
5. Chuck to be preferably of a safety type and to be enclosed on edges by stationary band guard with provision for adjusting stock. (Recommended.)
6. Lathe dogs to be of a safety type or enclosed. (Recommended.)
7. Tool to be guarded at point of contact by adjustable chip guard. (Recommended.)

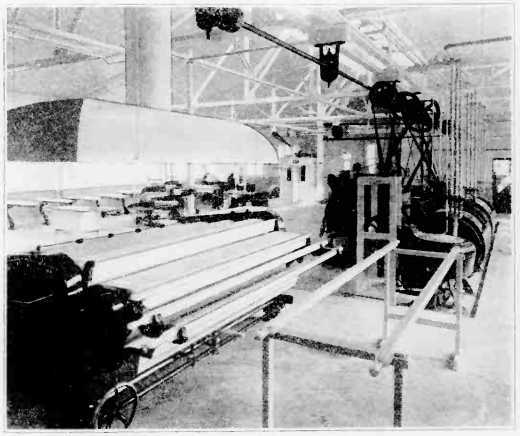

Fig. 6.—Laundry where good working conditions are maintained by facilities for carrying off steam, heat, etc.

Drill Presses

1. Driving belts should be guarded to height of six feet from floor. (Required.)
2. Tight and loose pulley belt shifter to extend through guard and to be equipped with automatic locking device. (Required.)
3. Cone pulley belt shifter to be applied. (Recommended.)
4. All power driven gears to be completely enclosed. (Required.)
5. Spindle shaft to be enclosed in sheet metal casing. (Required.) This is important as a woman's hair may very easily become caught on the revolving spindle.

6. Safety drill sockets to be used. (Recommended.)

7. Table to be equipped with drill press vise, or clamps, or other provision to be made to properly secure stock when drilling. (Recommended.)

Milling Machines

1. Tight and loose pulley belt shifter or clutch lever to be equipped with automatic locking device. (Required.)

2. Driving and feed belts to be guarded to height of six feet from floor. (Required.)

Fig. 7.—Workroom in an electric lamp factory. Note clean aisles and spacing of workers.

3. Cone pulley belt shifter to be applied. (Recommended.)

4. All power driven gears to be guarded. (Required.)

5. Telescoping universal coupling shaft to be completely enclosed. (Required.)

6. Cutter head to be guarded by chip guard of glass in metal frame, or by a suitable hood guard which may be used in connection with a device for distributing the cutting compound. (Recommended.)

Punch Presses

1. The point of operation must be made entirely safe. Work on punch presses varies greatly and no special type of safeguard will suit all operations. Each operation must be studied separately

and the most effective guard applied. The punch press is perhaps the most dangerous machine upon which women will be set to work. As the guarding of the point of operation of these machines is a somewhat complicated subject, it is impossible to discuss the question satisfactorily in this pamphlet; it is recommended, however, that no employer place women at work on punch presses until the safety department of the commission has had an opportunity to examine the machine and the guards used for the protection of the women operatives.

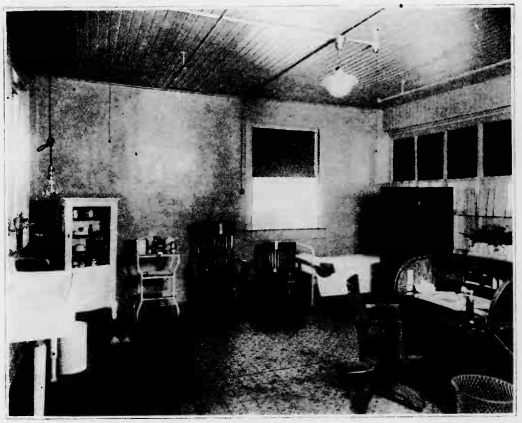

Fig. 8.—Girls' first aid and rest room and office of nurse. A separate room for men is also provided.

2. Positive mechanical stop to prevent repeating. (Recommended.)

3. Belt and flywheel to be guarded to height of six feet from floor. (Required.)

4. Treadle disconnecting device which will insure that the foot treadle, after being depressed, will be returned to its upper limit before another stroke can be taken by the machine. (Recommended.)

5. Suitable lock must be provided for the clutch or for the foot treadle so that the press cannot be accidentally tripped while adjustments or repairs are being made. This is not required where machines are driven by individual motor if the switch be placed in a location convenient to the operator.

6. Safety drill sockets to be used. (Recommended.)

7. Table to be equipped with drill press vise, or clamps, or other provision to be made to properly secure stock when drilling. (Recommended.)

Milling Machines

1. Tight and loose pulley belt shifter or clutch lever to be equipped with automatic locking device. (Required.)

2. Driving and feed belts to be guarded to height of six feet from floor. (Required.)

Fig. 7.—Workroom in an electric lamp factory. Note clean aisles and spacing of workers.

3. Cone pulley belt shifter to be applied. (Recommended.)

4. All power driven gears to be guarded. (Required.)

5. Telescoping universal coupling shaft to be completely enclosed. (Required.)

6. Cutter head to be guarded by chip guard of glass in metal frame, or by a suitable hood guard which may be used in connection with a device for distributing the cutting compound. (Recommended.)

Punch Presses

1. The point of operation must be made entirely safe. Work on punch presses varies greatly and no special type of safeguard will suit all operations. Each operation must be studied separately

and the most effective guard applied. The punch press is perhaps the most dangerous machine upon which women will be set to work. As the guarding of the point of operation of these machines is a somewhat complicated subject, it is impossible to discuss the question satisfactorily in this pamphlet; it is recommended, however, that no employer place women at work on punch presses until the safety department of the commission has had an opportunity to examine the machine and the guards used for the protection of the women operatives.

Fig. 8.—Girls' first aid and rest room and office of nurse. A separate room for men is also provided.

2. Positive mechanical stop to prevent repeating. (Recommended.)

3. Belt and flywheel to be guarded to height of six feet from floor. (Required.)

4. Treadle disconnecting device which will insure that the foot treadle, after being depressed, will be returned to its upper limit before another stroke can be taken by the machine. (Recommended.)

5. Suitable lock must be provided for the clutch or for the foot treadle so that the press cannot be accidentally tripped while adjustments or repairs are being made. This is not required where machines are driven by individual motor if the switch be placed in a location convenient to the operator.

The Industrial commission has published a special bulletin on the safeguarding of the punch press. Copies of this bulletin will be forwarded on request.

Education and Organization

Every woman worker should be carefully taught how to do the work assigned to her in a safe manner, and should be instructed regarding the hazards of her surroundings. If put to work on a machine, such as a punch press for instance, she should receive in-

Fig 9.—First aid room in one of the shops of the metal trade where women are doing work formerly done by men.

structions and close individual attention until she has acquired the habit of feeding the machine properly.

Employes who do not understand instruction given in English should be taught English, preferably on company time.

Rule books should be distributed containing safety rules applying to all workers. Special safety rules should be prepared for women engaged at work where there are special hazards. Such rules should, among other things, prohibit the wearing of loose clothing, gloves, rings, necklaces, etc., while working around machinery, and should require the use of suitable caps to prevent the hair from being caught on moving parts of machines. Other means of teaching the workers safety should be utilized as may appear desirable. Methods most commonly used are bulletin boards, moving pictures, talks, illustrated lectures, factory training classes, etc.

Every plant employing a large number of workers should have a safety organization of its employes and where a considerable part of the working force is made up of women, there should be a woman's committee or the women workers should be represented on the general workmen's committee. Conditions vary so greatly in different plants that no set form of organization can be outlined to be followed strictly. The Industrial Commission is prepared to assist employers and employes in developing this phase of safety work and will promptly respond to requests for such service.

Supervision and Maintenance

It is important that in large plants a competent person be placed in charge of all safety work. In smaller plants someone should be assigned to devote part of his time to supervision of this work. The duties of the safety supervisor would be to stimulate interest in safety among the rank and file of the working force, supervise all educational work, keep the safety organization working smoothly and effectively in all of its branches, cooperate with foreman in eliminating unsafe practices, make thorough weekly inspections of the entire plant, have charge of fire prevention and protection activities, including fire drills, pass on safety specifications of new machinery, investigate all accidents, see that all approved recommendations are carried out, keep in touch with injured employes, etc.

The scheme of safety supervision carried on in a factory should include efforts to maintain improved conditions. It is useless to safeguard machinery unless the guards are kept on the machines and used by the employes. Nothing will be gained from working out safety rules unless the rules are enforced. Due attention to factory housekeeping and safety discipline must be given if the accident prevention work is to bring results.

The Industrial commission has published a special bulletin on the safeguarding of the punch press. Copies of this bulletin will be forwarded on request.

Education and Organization

Every woman worker should be carefully taught how to do the work assigned to her in a safe manner, and should be instructed regarding the hazards of her surroundings. If put to work on a machine, such as a punch press for instance, she should receive in-

Fig. 9.—First aid room in one of the shops of the metal trade where women are doing work formerly done by men.

structions and close individual attention until she has acquired the habit of feeding the machine properly.

Employes who do not understand instruction given in English should be taught English, preferably on company time.

Rule books should be distributed containing safety rules applying to all workers. Special safety rules should be prepared for women engaged at work where there are special hazards. Such rules should, among other things, prohibit the wearing of loose clothing, gloves, rings, necklaces, etc., while working around machinery, and should require the use of suitable caps to prevent the hair from being caught on moving parts of machines. Other means of teaching the workers safety should be utilized as may appear desirable. Methods most commonly used are bulletin boards, moving pictures, talks, illustrated lectures, factory training classes, etc.

Every plant employing a large number of workers should have a safety organization of its employes and where a considerable part of the working force is made up of women, there should be a woman's committee or the women workers should be represented on the general workmen's committee. Conditions vary so greatly in different plants that no set form of organization can be outlined to be followed strictly. The Industrial Commission is prepared to assist employers and employes in developing this phase of safety work and will promptly respond to requests for such service.

Supervision and Maintenance

It is important that in large plants a competent person be placed in charge of all safety work. In smaller plants someone should be assigned to devote part of his time to supervision of this work. The duties of the safety supervisor would be to stimulate interest in safety among the rank and file of the working force, supervise all educational work, keep the safety organization working smoothly and effectively in all of its branches, cooperate with foreman in eliminating unsafe practices, make thorough weekly inspections of the entire plant, have charge of fire prevention and protection activities, including fire drills, pass on safety specifications of new machinery, investigate all accidents, see that all approved recommendations are carried out, keep in touch with injured employes, etc.

The scheme of safety supervision carried on in a factory should include efforts to maintain improved conditions. It is useless to safeguard machinery unless the guards are kept on the machines and used by the employes. Nothing will be gained from working out safety rules unless the rules are enforced. Due attention to factory housekeeping and safety discipline must be given if the accident prevention work is to bring results.

SANITATION

The sanitation code of the Industrial Commission contains the specific requirement for sanitary conveniences, drinking water, wash rooms, and dressing rooms. This bulletin may be had upon application to the Industrial Commission at Madison.

Lavatories

Lavatories should be located in the same enclosure with the toilets, or near them. The best type of wash bowl is the long sink (without stopper) in which the workers may wash in warm water (running from individual faucets). Liquid soap in containers is found to be more economical than individual bars of soap. Paper towels in metal containers, and a covered can for waste, complete the necessary equipment in a modern wash room.

Cleaning

Wherever possible, sweeping and cleaning are to be done after working hours. This avoids interference with production, facilitates work of cleaning and sweeping and avoids the contamination of the atmosphere while the workers are present.

EQUIPMENT

Dressing Rooms

Rooms should be provided in which women may change their clothes for work, and in which their street clothes may be kept during the working hours. These rooms should not be used for any

Fig. 10.—This arrangement of work tables causes eye-strain to the workers who must face the windows. Note the eye shades which some who face windows are obliged to wear.

other purpose, and it is not desirable to have them connected with other departments. The dressing rooms should be located near the employes' entrance, the time clocks, or the women's department in the shop.

If many women are employed, it becomes desirable to have several small dressing rooms conveniently located to save time for both the employer and the employe at the beginning and the end of the day. Metal lockers are not necessary. A very convenient and useful equipment consists of a metal pipe in which coat hangers have been fixed, fastened near the wall, and at a convenient height for the workers. Over this metal pipe may be placed a rack for hats.

SANITATION

The sanitation code of the Industrial Commission contains the specific requirement for sanitary conveniences, drinking water, wash rooms, and dressing rooms. This bulletin may be had upon application to the Industrial Commission at Madison.

Lavatories

Lavatories should be located in the same enclosure with the toilets, or near them. The best type of wash bowl is the long sink (without stopper) in which the workers may wash in warm water (running from individual faucets). Liquid soap in containers is found to be more economical than individual bars of soap. Paper towels in metal containers, and a covered can for waste, complete the necessary equipment in a modern wash room.

Cleaning

Wherever possible, sweeping and cleaning are to be done after working hours. This avoids interference with production, facilitates work of cleaning and sweeping and avoids the contamination of the atmosphere while the workers are present.

EQUIPMENT

Dressing Rooms

Rooms should be provided in which women may change their clothes for work, and in which their street clothes may be kept during the working hours. These rooms should not be used for any

Fig. 10.—This arrangement of work tables causes eye-strain to the workers who must face the windows. Note the eye shades which some who face windows are obliged to wear.

other purpose, and it is not desirable to have them connected with other departments. The dressing rooms should be located near the employes' entrance, the time clocks, or the women's department in the shop.

If many women are employed, it becomes desirable to have several small dressing rooms conveniently located to save time for both the employer and the employe at the beginning and the end of the day. Metal lockers are not necessary. A very convenient and useful equipment consists of a metal pipe in which coat hangers have been fixed, fastened near the wall, and at a convenient height for the workers. Over this metal pipe may be placed a rack for hats.

The addition of a bench or two completes the necessary furniture for such a room.

Lunch Room

The noon lunch and rest period is a vital factor in daily production. To the employes who remain in the shop during the lunch hour, the employer has an obligation. This is recognized quite generally, and wherever possible, employers are equipping separate and distinct rooms where the employes may eat their lunch in a

Fig. 11.—This arrangement of work tables (perpendicular to windows) avoids eye-strain and operators do not sit in their own light. Compare with Fig. 10.

manner consistent with good health. The furnishings need not be elaborate, but the room should be comfortable and well-ventilated. It is best to have small tables seating from four to six people. There should be provision made in small shops employing a few workers, where soup, coffee and other hot food can be prepared by the employes. In the larger shops it is necessary to have someone in charge of the lunch room to prepare the food that is sold to the employes, to do the purchasing, and to care for the room. The cafeteria type, as well as the regular lunch room, is coming to be recognized as suitable for factory use.

Chairs

Section 1728 1 (Stats.)—Every person or corporation employing females in any manufacturing or mercantile establishment in the

state of Wisconsin shall provide suitable seats for the females so employed, and shall permit the use of such seats by them when they are not necessarily engaged in the active duties for which they are employed.

The day of the ordinary wooden chair and of stools without backs as a part of modern factory equipment, is past. Factory managers and the manufacturers of factory chairs know that a chair to have utility, must be adjustable, so that it can be more nearly physiologically correct. During the last few years, the manufacturers of

Fig. 12.—Night view of same factory shown in Fig. 11. The indirect lighting system gives a daylight effect.

factory equipment have given some consideration to the things that make a factory chair desirable from the standpoint of physical comfort. Chairs should support the part of the body receiving the greatest strain from the work.

For certain operations the factory chair must be high. Under such conditions a suitable foot rest should be provided. In most cases the foot rest should preferably be attached to the work table, rather than to the chair. It should be large enough, and placed in such a way that the operative may be seated in a normal position.

When the work requires constant standing, chairs should be available for use during lulls in the day's work, and the employes should be encouraged to use them. Wherever possible, it is well to arrange the work so that the operative may stand part of the

The addition of a bench or two completes the necessary furniture for such a room.

Lunch Room

The noon lunch and rest period is a vital factor in daily production. To the employes who remain in the shop during the lunch hour, the employer has an obligation. This is recognized quite generally, and wherever possible, employers are equipping separate and distinct rooms where the employes may eat their lunch in a

Fig. 11.—This arrangement of work tables (perpendicular to windows) avoids eye-strain and operators do not sit in their own light. Compare with Fig. 10.

manner consistent with good health. The furnishings need not be elaborate, but the room should be comfortable and well-ventilated. It is best to have small tables seating from four to six people. There should be provision made in small shops employing a few workers, where soup, coffee and other hot food can be prepared by the employes. In the larger shops it is necessary to have someone in charge of the lunch room to prepare the food that is sold to the employes, to do the purchasing, and to care for the room. The cafeteria type, as well as the regular lunch room, is coming to be recognized as suitable for factory use.

Chairs

Section 1728.1 (Stats.)—Every person or corporation employing females in any manufacturing or mercantile establishment in the

state of Wisconsin shall provide suitable seats for the females so employed, and shall permit the use of such seats by them when they are not necessarily engaged in the active duties for which they are employed.

The day of the ordinary wooden chair and of stools without backs as a part of modern factory equipment, is past. Factory managers and the manufacturers of factory chairs know that a chair to have utility, must be adjustable, so that it can be more nearly physiologically correct. During the last few years, the manufacturers of

Fig. 12.—Night view of same factory shown in Fig. 11. The indirect lighting system gives a daylight effect.

factory equipment have given some consideration to the things that make a factory chair desirable from the standpoint of physical comfort. Chairs should support the part of the body receiving the greatest strain from the work.

For certain operations the factory chair must be high. Under such conditions a suitable foot rest should be provided. In most cases the foot rest should preferably be attached to the work table, rather than to the chair. It should be large enough, and placed in such a way that the operative may be seated in a normal position.

When the work requires constant standing, chairs should be available for use during lulls in the day's work, and the employes should be encouraged to use them. Wherever possible, it is well to arrange the work so that the operative may stand part of the

time and sit part of the time. Change of position appears to decrease fatigue and increase production.

Illumination

The machines and work tables should be arranged to receive the natural light advantageously. Arranging them in rows perpendicular to the windows is superior to rows parallel to the windows. With the latter scheme, half the operators must face the bright windows and hence suffer eye strain; whereas the others work in their own light more or less. Arranging the tables perpendicularly to the windows avoids both of these difficulties and in general facilitates the movement of material through the department.

The artificial lighting should be made to simulate the natural illumination, so that when darkness comes on, production need not slack down due to inability of the operators to see well. For correct artificial lighting methods, which will comply with the Industrial Lighting Code recently adopted by the Industrial Commission, employers are directed to a bulletin on the subject issued August 1, 1917.

First Aid Room

Industries in which there are accident hazards establish first aid rooms and employ trained nurses to take care of minor injuries, and to give first care in cases of serious injury, pending medical aid. Industries in which there are no specific accident hazards, also provide first-aid rooms where advice and counsel may be given in cases involving the health and welfare of the employes and their families. In connection with the first-aid and consulting room in shops where women work, there should be a separate room in which women may recover if they are temporarily unfit for work, and if such recovery may be accomplished in time and in such a way that the worker may return to her labor.

First Aid Records

Correct first aid records are valuable. These records facilitate the firm's responsibility in its reports of accidents to the Industrial Commission. They also serve as valuable data in studies of employes' broken time due to sickness and accident.

Uniforms

The use of uniform clothing for women workers is becoming generally popular. Close fitting clothing is necessary for safety in machine employment, yard works, etc., and should be encouraged.

In order to make the use of uniforms universally successful, the garment must not only be suitable from the standpoint of safety, but must at the same time look well.

A committee of women workers should pass upon the garment selected, and if necessary, design it.

HOUSEKEEPING AND SUPERVISION

Adequate supervision of the factory housekeeping is as important an administrative duty as supervision of the factory production.

Women are engaged in this supervisory work in many Wisconsin establishments. A factory housekeeper or service executive has the responsibility of the care and upkeep of all factory equipment.

Fig. 13.—A well arranged and well lighted interior.

She assists in supervising the installing of machines and work tables; she sees that workers who can sit at their work have chairs that are adjusted properly; and she supervises the care and cleaning of the sanitary conveniences. Such a supervisor will study the temperature and humidity in the work rooms and she will ventilate the room during rest periods. Each day a regular inspection of the shop is made for the purpose of looking after the shop housekeeping, the new workers, and the equipment in its relation to the physical comfort of the employes. In the daily shop visit, the supervisor will confer with the foremen and forewomen in reference to the new workers, broken time, industrial relations and difficulties arising

time and sit part of the time. Change of position appears to decrease fatigue and increase production.

Illumination

The machines and work tables should be arranged to receive the natural light advantageously. Arranging them in rows perpendicular to the windows is superior to rows parallel to the windows. With the latter scheme, half the operators must face the bright windows and hence suffer eye strain; whereas the others work in their own light more or less. Arranging the tables perpendicularly to the windows avoids both of these difficulties and in general facilitates the movement of material through the department.

The artificial lighting should be made to simulate the natural illumination, so that when darkness comes on, production need not slack down due to inability of the operators to see well. For correct artificial lighting methods, which will comply with the Industrial Lighting Code recently adopted by the Industrial Commission, employers are directed to a bulletin on the subject issued August 1, 1917.

First Aid Room

Industries in which there are accident hazards establish first aid rooms and employ trained nurses to take care of minor injuries, and to give first care in cases of serious injury, pending medical aid. Industries in which there are no specific accident hazards, also provide first-aid rooms where advice and counsel may be given in cases involving the health and welfare of the employes and their families. In connection with the first-aid and consulting room in shops where women work, there should be a separate room in which women may recover if they are temporarily unfit for work, and if such recovery may be accomplished in time and in such a way that the worker may return to her labor.

First Aid Records

Correct first aid records are valuable. These records facilitate the firm's responsibility in its reports of accidents to the Industrial Commission. They also serve as valuable data in studies of employes' broken time due to sickness and accident.

Uniforms

The use of uniform clothing for women workers is becoming generally popular. Close fitting clothing is necessary for safety in machine employment, yard works, etc., and should be encouraged.

In order to make the use of uniforms universally successful, the garment must not only be suitable from the standpoint of safety, but must at the same time look well.

A committee of women workers should pass upon the garment selected, and if necessary, design it.

HOUSEKEEPING AND SUPERVISION

Adequate supervision of the factory housekeeping is as important an administrative duty as supervision of the factory production.

Women are engaged in this supervisory work in many Wisconsin establishments. A factory housekeeper or service executive has the responsibility of the care and upkeep of all factory equipment.

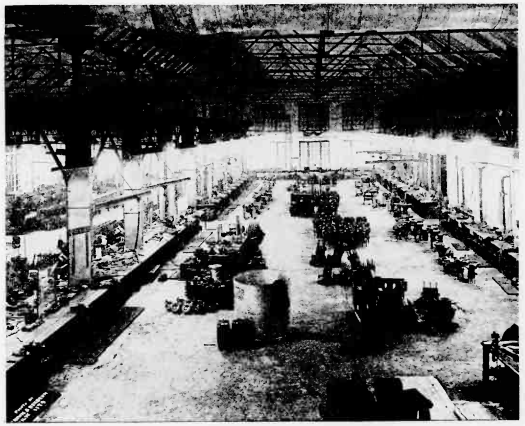

Fig. 13.—A well arranged and well lighted interior.

She assists in supervising the installing of machines and work tables; she sees that workers who can sit at their work have chairs that are adjusted properly; and she supervises the care and cleaning of the sanitary conveniences. Such a supervisor will study the temperature and humidity in the work rooms and she will ventilate the room during rest periods. Each day a regular inspection of the shop is made for the purpose of looking after the shop housekeeping, the new workers, and the equipment in its relation to the physical comfort of the employes. In the daily shop visit, the supervisor will confer with the foremen and forewomen in reference to the new workers, broken time, industrial relations and difficulties arising

from misunderstandings among workers and between workers and overseers. The supervisor is the business consultant in matters of management in the lunch room and is supervisor of the recreational activities during the lunch and rest periods.

Home Visits

Visits are made to the homes of absentees for the purpose of keeping capable workers on the company's pay roll, and to determine causes of absence and quitting. Visits are also made to the homes of workers who are recovering from sickness and accident, there to supervise recovery in order to avoid unnecessary absence and to see that recovery is permanent.

Public Agencies

A register of public educational, public recreational and public health agencies should be available for the employes' use so that they may gain a working acquaintance with such agencies. The Service Department should be equipped to arrange for Americanization work among the employes. The Service Department should also make the fullest use of health clinics and dispensaries. Public Health officials will see that short talks on personal hygiene and allied topics are given to employers and workers.

A register should be kept of boarding and rooming houses that are desirable from the standpoint of living accommodations for people who are away from home.

Employment Department

It is desirable to have the employment work in the department of the executive who supervises the housekeeping and attends to the health and hygiene of the workers. All personal relations work in the shop should be under one executive. The responsibility of the employment department includes interviewing applicants, placement, transfers, dismissals, supervising the worker during learning periods, and making learning facilities effective. The employment executive has a thorough knowledge of all machine processes and hand work in the shop; she knows the personal qualities necessary in the performance of each job. Without these, no satisfactory placement and training can be done.

The employment department should keep such child labor records and permit records as will give the firm a fair measure of safety under the Compensation Act and the Child Labor Law. The employment executive should make periodical studies of individual cases of decrease in production. Studies of wage rates should be made with a view to making a fair distribution during periods of learning and thereafter. Studies may be made of hourly production, fatigue, and lost time, with a view to establishing the length of the work day on the basis of the physical and business welfare of the firm and force.

MSH27827

END OF
TITLE